



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,538	08/26/2003	Masahiro Hosoda	038920.48799C1	2286

23911 7590 04/06/2004

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

PEAVEY, ENOCH E

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/647,538	HOSODA ET AL.	
	Examiner	Art Unit	
	Enoch E Peavey	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>26 August 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

I. An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification of in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

Claim Rejections - 35 USC § 102

II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A. Claims 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagase, US No. 5,947,611 ("Nagase").

1. Nagase discloses a combination seal ring (FIG. 5) with comprising a seal ring (19) secured to the circumferential face of the fixed ring (5a),
2. The slinger (26) made of metal and secured to the circumferential face of the rotational ring (4a), and an encoder (31) supported by and secured to the slinger (FIG. 5).

3. The seal ring comprises a metal core (21) consisting of a fixed cylindrical portion (23) which has an end rim made is fitted and secured to the circumferential face of the fixed ring (5a).

4. And a fixed circular ring portion (24) bent toward the circumferential face of the rotational ring (4a) from the end rim of the fixed cylindrical portion (23) and a resilient member bonded aaround the metal core and having seal lips with an end rim (FIG. 5).

5. The slinger (26) comprising a rotational cylindrical portion (27) which has an end rim and is fitted and secured to the circumferential face of the rotational ring (4a), and a rotational circular ring portion (28), which is bent toward the circumferential face of the fixed ring from the end rim of the rotational cylindrical portion and has an end rim.

6. The rotational circular ring portion (28) having a first side face and second side face axially opposite to each other (Fig. 5), the slinger (28) having a smooth surface portion on the circumferential face of the rotational cylindrical portion and on the first side face of the rotational circular ring portion, respectively (FIG. 5),

7. Against which the respective end rim or the seal lips is rubbed the encoder having an end rim and being made of a rubber magnet in which S poles and N poles arc alternately arranged in the circumferential direction (FIG. 13), and bonded and supported on the second side face of the rotational circular ring portion which is opposite to the seal lips (FIG. 5).

8. The encoder (31) is bonded to the rotational circular ring (28) portion with the encoder having a part which covers the end rim of the rotational circular ring portion so as to be connected to the end rim of the rotational circular ring portion (FIG. 5).

Art Unit: 3676

9. The arrangement may be used in a bearing unit of an automobile.
10. Examiner note: the process in which the encoder is bonded to the slinger is given very little patentable weight because applicant is attempting to claim a process limitation in an article claim.

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagase.

1. Nagase does not disclose the encoder existing in a position depressed by at least .2mm, or having a cross-section between 4 and 7 mm, and a height of at least 2.00 mm.

2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Nagase to find the optimum range in which sealing and rotational detection took place, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involve only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233,235 (CCPA 1955)

Art Unit: 3676

IV. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enoch E Peavey whose telephone number is 305 1977.

The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308- 3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Enoch E Peavey
Art Unit 3676

April 4, 2004

